

ABSTRACT OF THE DISCLOSURE

Systems and methods for improving medical fluid delivery systems, such as hemofiltration (“HF”) and hemodiafiltration (“HDF”) are provided. In first embodiments, systems and methods for selectively performing pre- and postdilution HF and HDF clearance modes is provided. In other embodiments, systems and methods for providing prime bolus and rinseback fluid volumes before, during and/or after HF and HDF therapies are provided. In further embodiments, improved systems and methods for removing ultrafiltrate from the patient are provided. Still further, improved filtration configurations and methods are provided.